



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,965	12/09/2003	Ari Minkkinen	612.43291X00	2197
20457	7590	09/01/2006		
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873				
			EXAMINER JOHNSON, EDWARD M	
			ART UNIT 1754	PAPER NUMBER

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

1x

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/729,965	<b>Applicant(s)</b> MINKKINEN ET AL.	
	<b>Examiner</b> Edward M. Johnson	<b>Art Unit</b> 1754	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 16 August 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: 1-20.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.



Edward M. Johnson  
Primary Examiner  
Art Unit: 1754

Continuation of 5. Applicant's reply has overcome the following rejection(s): the rejection of claims 17-18 under 35 USC 112(1) has been overcome by Applicant's indication of support for the solvents having different concentrations.

Continuation of 11. does NOT place the application in condition for allowance because: It is argued that a first difference between the present invention... a dialdehyde and an alkanolamine. This is not persuasive because Applicant appears to admit that a mixture of such reactants is disclosed, Applicant merely claims contacting with a solvent comprising amine, and Pounds discloses "amine products" (see columns 5-6). And, in any case, no such 100% reaction resulting in zero amines present is disclosed, nor does Applicant appear to allege that the disclosed products are in fact different and contain no amines, arguing only that the mixture is referred to as a reaction product.

It is argued that the scavenging compounds are prepared by reaction... and (2) and aldehyde. This is not persuasive before the reasons above.

It appears from the Examiner's comments... some unreacted amines. This is not persuasive for the reasons above. Applicant appears to assert that a chemical reaction producing a product different an amine is disclosed. However, no such disclosure is found. Rather, Pounds discloses "amine products" (see columns 5-6). Applicant appears to admit that the amines may be "unreacted" and it would have been obvious to select an optimum amount of amine in either step including 20-95% by weight because Pounds discloses a single circuit any concentration and about 85% (see abstract and column 6, lines 18-20). It is also further noted that Applicant does not allege that the product contains no amines, or is not itself an amine, as the nitrogen atoms do not appear to be removed from the resulting solution of amines and dialdehyde of the prior art.

It is argued that a second difference between the present invention... to dehydrate the gas. This is not persuasive because Applicant appears to admit that contacting with the claimed solvent is disclosed, arguing only that Applicant has found the further advantage of dehydration. However, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). And, in any case, Pounds discloses that since hydrogen sulfide is corrosive in the presence of water and poisonous in very small concentrations, it must be removed from natural gas streams "before use" (see column 1, lines 45-50), which would obviously, to one of ordinary skill, at least motivate contacting again to remove water from the natural gas after the hydrogen sulfide has been removed but "before use" of the natural gas, as disclosed. Further, it would have been within the purview of one of ordinary skill in the art would to expect a disclosure of 85% to include a range of acceptable values at least including 90%.

It is argued that moreover, the Pounds et al patent does not... regenerating the scavenging compounds. This is not persuasive because distilling would regenerate and Pounds discloses heating to below about 150 degrees (see column 6, lines 21-26), which would at least suggest distilling or expanding before the suggested second contact. Pounds further discloses the known regeneration of the compounds (see paragraph bridging columns 1-2).

It is argued that further, the specific steps of regeneration... not have been suggested by Pounds et al. This is not persuasive because distilling would regenerate and Pounds discloses heating to below about 150 degrees (see column 6, lines 21-26), which would at least suggest distilling or expanding before the suggested second contact. Pounds further discloses the known regeneration of the compounds (see paragraph bridging columns 1-2).

It is argued that the Grierson et al. patent discloses... acid gas absorption process. This is not persuasive because Applicant appears to admit that methyldiethanolamine is disclosed.